

**Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Amendments to Part 4 of the Commission's Rules)	PS Docket No. 15-80
Concerning Disruption to Communications)	
)	
New Part 4 of the Commission's Rules Concerning)	ET Docket No. 04-35
Disruptions to Communications)	
)	
The Proposed Extension of Part 4 of the)	PS Docket No. 11-82
Commission's Rules Regarding Outage Reporting)	
To Interconnected Voice over Internet Protocol)	
Providers and Broadband Internet Service)	
Providers)	

REPLY COMMENTS OF CTIA

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To: The Commission

REPLY COMMENTS OF CTIA

I. INTRODUCTION AND SUMMARY

CTIA submits these reply comments in response to the initial comments filed in the above-captioned proceeding.¹ The record demonstrates support for the 2016 revisions to the network outage rules but a clear lack of support for expanding those rules, particularly for wireless providers. Existing rules are sufficient to fully inform the Commission about disruptions to wireless networks, and additional rules are not warranted at this time. The record demonstrates that the *Further Notice* does not establish the requisite connection between the proposed rules and any legitimate purpose or concrete benefit. Comments further confirm that

¹ *Amendments to Part 4 of the Commission's Rules Concerning Disruptions to Communications*, Report and Order, Further Notice of Proposed Rulemaking, and Order on Reconsideration, FCC 16-63 (rel. May 26, 2016) ("*Further Notice*").

the proposals extend beyond the underlying rationale for this proceeding: to ensure that all outages be timely reported if they affect a designated number of users or impact special facilities. Wireless providers are doing that today. There is no reporting “gap” that the Commission needs to fill.

Commenters also demonstrate why the costs of complying with the proposed rules would far exceed any conceivable benefit. For example, the rules would force carriers to expend substantial resources on new monitoring and reporting systems that would not generate additional network reliability benefits. Some proposals are infeasible for carriers to implement. Given these liabilities, it is not surprising that the rules drew minimal support or no support at all.

In fact, the path the *Further Notice* takes may harm the goal it espouses – enhancing network reliability. If carriers are faced with even more obligations, they may be forced to shift resources away from service restoration and toward avoiding regulatory sanctions. This is not only a carrier concern. As one public safety agency observes:

Particularly given (i) the Commission’s recent assessment and negotiation of steep forfeitures as a result of 9-1-1 outages to “send a message,” and (ii) the perception that the Commission is particularly aggressive and draconian in its levying of forfeitures, Commission intervention is more likely to get senior management and legal counsel involved to mitigate potential regulatory liability, and to take up time of personnel who could be working to restore service to assure that accurate information is provided the Commission regarding the outage, when the public interest demands that the focus be on restoration of service.²

The Commission should refrain from adopting its proposals to require reporting of “hard down” outages involving mobile BIAS, alleged network “degradation” events, call failures at wireless cell sites, and outages affecting wireless service to rural areas. Nor should it expand the

² Comments of Boulder Regional Emergency Telephone Service Authority (filed Aug. 26, 2016) (“BRETSA Comments”) at 10.

Part 4 rules to require reporting of cybersecurity-related events, as a better course is continued collaboration with industry on nimble and flexible best practices and other measures. Finally, the Commission should not alter its longstanding policy to treat outage reports as confidential. If the Commission decides to permit access to certain agencies, it should impose effective safeguards, which numerous commenters recommend, to prevent unauthorized access to and disclosure of the reports.

II. THERE IS NO BASIS TO ADOPT A MOBILE BIAS OUTAGE RULE.

Nearly all commenters oppose the Commission’s proposal to create a new reporting obligation for outages that affect BIAS. Commenters also challenge the *Further Notice*’s cost-benefit analysis, and demonstrate that separate BIAS outage reporting would impose significant costs and compliance burdens on BIAS providers that outweigh possible benefits.³

Parties that address mobile BIAS agree with CTIA that a BIAS reporting mandate would be redundant and generate no additional benefits, because mobile providers already must report outages that affect customers’ ability to access Internet access services.⁴ As T-Mobile explains, the proposal is “duplicative” because it “fails to identify any data that it would obtain by

³ *E.g.*, Comments of the Alliance for Telecommunications Industry Solutions (filed Aug. 26, 2016) (“ATIS Comments”) at 3-5; Comments of AT&T (filed Aug. 26, 2016) (“AT&T Comments”) at 9-10; Comments of CenturyLink (filed Aug. 26, 2016) (“CenturyLink Comments”) at 3-5; Comments of United States Telephone Association (filed Aug. 26, 2016) (“USTA Comments”) at 6-8.

⁴ *See* 47 C.F.R. Sec. 4.9(e). *See also* AT&T Comments at 10 (“the proposed rules would be duplicative”); Comments of CTIA (filed Aug. 26, 2016) (“CTIA Comments”) at 4-5; Comments of T-Mobile USA, Inc. (filed Aug. 26, 2016) (“T-Mobile Comments”) at 4 (“The same network used to provide CMRS is used to provide BIAS.”); Comments of Verizon (filed Aug. 26, 2016) (“Verizon Comments”) at 6 (cell site outages reported as outages “invariably affect the availability of both wireless voice (VoLTE) and mobile broadband service.”).

overlaying a BIAS outage reporting regime on the wireless industry that would not otherwise be captured by the existing wireless outage reporting requirements.”⁵

Further, the proposal completely ignores how mobile BIAS is provisioned differently from fixed broadband. For example, the proposal would add new reporting metrics based on throughput as if it is a constant, but throughput is a performance measure that continually fluctuates on mobile networks and would thus be an inappropriate and arbitrary regulatory standard.⁶ The proposal also is based on the incorrect idea that consumers “expect” download speeds of at least 25 Mbps, but the Commission has used that metric for wireline, not mobile, networks.⁷ Not a single party that discusses mobile BIAS endorses a new BIAS-specific reporting mandate, let alone explains why such a rule serves the objectives of this proceeding. Nothing in the initial comments lends any factual support to the *Further Notice’s* proposal for reporting BIAS outages. Given this record, the Commission has no basis to adopt a new BIAS reporting rule for wireless carriers.

The few commenters endorsing new outage rules for BIAS do not address mobile BIAS specifically and thus fail to confront the overlap those rules would create with existing rules. They merely assert that BIAS services are increasingly important to consumers and are subject to outages.⁸ CTIA agrees, but this fact does not justify imposing a *new* reporting rule, because CMRS carriers *already* must report outages that exceed a particular magnitude and duration, and

⁵ T-Mobile Comments at 4-5.

⁶ CTIA Comments at 8-9.

⁷ CTIA Comments at 7; T-Mobile Comments at 5.

⁸ *E.g.*, Comments of the New York State Public Service Commission (filed Aug. 26, 2016) (“New York PSC Comments”) at 5-6.

mobile BIAS is now defined by the Commission as CMRS. In addition, wireless carriers are intensely competing with each other to offer the most reliable services, including BIAS, and thus have ample incentives to minimize outages. Competition works far more effectively than prescriptive regulation to drive carriers' actions in the marketplace that benefit consumers.

III. A “DEGRADATION” REPORTING RULE SHOULD NOT BE ADOPTED.

Nearly all parties also oppose the *Further Notice*'s separate proposal to require reports of network “degradation.” Commenters first point out that the Commission previously rejected this concept and that the *Further Notice* supplies no rationale for resurrecting it.⁹ Second, they note that decreases in network performance are not “outages,” but in fact relate to quality of service, and thus a “degradation” rule would exceed the scope and purpose of this proceeding.¹⁰ Third, the record shows why the proposed metrics – decreased throughput, increased packet loss and increased latency – would not achieve the rule's stated purpose. Changes in these metrics do not necessarily degrade the quality of customers' service, let alone disrupt it.¹¹ Moreover, because

⁹ AT&T Comments at 18; CTIA Comments at 10; Comments of ITTA-The Voice of Mid-Size Communications Companies (filed Aug. 26, 2016) (“ITTA Comments”) at 11-12.

¹⁰ CTIA Comments at 10; ITTA Comments at 10-11 (“In the final analysis, the ill-defined proposal resembles a proposed quality-of-service metric rather than one that could lead to any useful outage reporting information.”); NTCA Comments at 6 (“The goal of the NORS requirements is not to collect information for the sake of compiling data, but rather for the Commission to understand when public safety is impacted.”).

¹¹ *E.g.*, ATIS Comments at 13 (“None of these metrics are measured today and cannot be used to determine whether a particular customer, or even a particular set of customers, can reliably access the Internet. In fact some packet loss, latency, and decay in throughput are expected for BIAS and likely would not affect end users at all.”); AT&T Comments at 18 (“IP networks can be engineered to ensure that throughput variations, packet loss and latency rarely affect customers while maintaining high levels of flexibility, efficiency and QoS.”); Comments of Comcast Corporation (filed Aug. 26, 2016) (“Comcast Comments”) at 14 (the “proposed metrics would lead to outage reporting for network events that do not adversely affect consumers”); CTIA Comments at 10.

broadband networks are designed to manage congestion in different ways, there are no measures of “degradation” that can be imposed industry-wide and provide accurate or useful information.¹² Fourth, these metrics constantly change with ever-changing network usage levels. Substantial fluctuations are particularly common on CMRS networks due to traffic surges at stadiums, at public events and in other situations, but do not mean network performance is impaired. In part for this reason, there are no recognized standards for these metrics on which a “degradation” rule could legitimately be based.¹³

In contrast to the absence of benefits, the proposal would impose substantial costs and burdens on carriers to purchase and deploy systems that could track, measure and alert personnel as to these constantly changing metrics in real time.¹⁴ As NTCA points out, “Small, rural providers are not currently collecting data in regard to network degradation, nor is there a plug-and-play, cost-effective solution that small providers could employ to capture the requested information.”¹⁵ A group of mid-sized carriers observes that “measuring packet loss and then (over)reporting on it is a costly and painstaking process.”¹⁶ The same holds true for all carriers.

¹² *E.g.*, Comments of National Cable & Telecommunication Association (filed Aug. 26, 2016) (“NCTA Comments”) at 6.

¹³ ATIS Comments at 14 (“[t]here are no established industry standards that would indicate to BIAS providers that certain markers of network performance could or should be read to indicate an outage”); CTIA Comments at 11.

¹⁴ CTIA Comments at 11.

¹⁵ NTCA Comments at 5.

¹⁶ ITTA Comments at 13. *See also* CTIA Comments at 11.

IV. A CMRS “CALL FAILURE” RULE SHOULD NOT BE ADOPTED.

Every party that commented on the proposal to require reporting when a cell site is operating at capacity opposed it.¹⁷ They note that the Commission had previously made the same proposal and that it was roundly opposed. The record provides no rationale to adopt such a mandate – and many reasons why it should be rejected.¹⁸

First, parties agree that a network operating at capacity does not constitute an outage at all, but shows that the network is fully functioning.¹⁹ The constant fluctuations in traffic that are inherent to mobile networks may on occasion temporarily put more capacity demand on a cell site than it may be able to handle. But that is not an outage, and there is thus no basis to require that it be reported.

Second, they note that the *Further Notice* once again fails to identify any concrete benefits that the proposed rule would achieve. Carriers have ample incentives to address call congestion situations through engineering techniques that manage traffic.²⁰ Imposing this new requirement would flood the Commission with useless information that would indicate nothing

¹⁷ ATIS Comments at 16; AT&T Comments at 27-29; CTIA Comments at 13-14; T-Mobile Comments at 7; Verizon Comments at 7. See also BRETSA Comments at 13 (“

¹⁸ The one state agency commenting on this proposal also opposes it. BRETSA Comments at 13 (“[P]roviders should *not* be required to report instances in which network facilities are at capacity, but no calls have been blocked. It is inconsistent with market regulation for the Commission to second-guess provider network configurations and capacity.”).

¹⁹ CTIA Comments at 13-14; T-Mobile Comments at 7-8.

²⁰ AT&T Comments at 28 (“Almost all unplanned congestion events are one-off events and fleeting in nature. Any performance data that suggest a trend of congestion will be quickly identified and resolved, as demanded by a competitive market.”); CTIA Comments at 15-16; Verizon Comments at 7.

more than that a particular site is operating at capacity, a situation that often quickly resolves itself.

Third, the lack of any cognizable benefit from a call failure rule stands in sharp contrast to the costs it would impose on carriers, which would need to create and implement new reporting systems to track the performance of each of their cell sites minute by minute so that they would be able to file a timely “call failure” report.²¹ As AT&T notes, “[C]ongestion data is never real-time, and in some cases may be delayed as much as two hours. Re-engineering network metrics to provide more frequent, real-time aggregation for no business purposes, simply to satisfy a regulatory fiat, would be enormously costly and complex.”²²

Finally, as CTIA noted, such a rule would be harmful as well as unwarranted, because it would distort carriers’ investments in their networks to minimize reporting burdens.²³ It would skew investment away from new facilities and cause carriers to over-engineer existing cell sites, well above capacity demands – even though competition and network demands would drive the carrier to invest its capital to build new sites or improve service in other locations.

V. A RURAL OUTAGE REPORTING RULE IS UNNECESSARY.

Commenters agree that under the Commission’s newly revised Rule 4.9(e), all cell sites – whether rural or non-rural – count equally toward determining when an outage is reportable,

²¹ CTIA Comments at 16; T-Mobile Comments at 9.

²² AT&T Comments at 29.

²³ CTIA Comments at 3-4.

regardless of whether they individually have more or fewer potentially affected users.²⁴ Given this change, there is no reason to consider a special rural reporting rule.

Commenters also point out that imposing a geography-based reporting metric for rural counties would be unworkable.²⁵ Wireless coverage does not neatly follow county boundaries, making it impractical for carriers to attempt to map the areas served by particular cell sites in order to determine when and where an area is affected by an outage. The rule also would be burdensome, because it would require carriers to incur the expense of modifying their network monitoring capabilities to identify “rural” areas and calculate when a reportable outage involving those areas occurs.

Only three commenters support a different rule for wireless network outages in rural areas, but they do not address the fact that amended Rule 4.9(e) eliminates the potential for underreporting of CMRS outages in rural areas. One state commission merely notes that the public is increasingly relying on wireless communications, but does not explain why this supports imposing a different rule.²⁶ The other two parties note that wireless carriers serve fewer customers in rural areas,²⁷ but the new rule corrects for that difference by treating all cell sites as having an equal number of users for purposes of calculating reporting thresholds.

²⁴ ATIS Comments at 16; AT&T Comments at 30; T-Mobile Comments at 17; CTIA Comments at 17.

²⁵ AT&T Comments at 31; T-Mobile Comments at 18.

²⁶ New York PSC Comments at 11.

²⁷ Comments of Washington Utilities and Transportation Commission Comments (filed Aug. 26, 2016) (“Washington UTC Comments”) at 3; Comments of National Association of State 911 Administrators (filed Aug. 26, 2016) at 3.

At most, if the Commission does not reject a new CMRS reporting rule outright, it should defer considering such a rule until it gains experience with its recent changes to the CMRS reporting rules.²⁸ Given that those changes have not yet taken effect and will not for at least two more months,²⁹ there is no factual basis for the Commission to change those rules again so soon.

VI. OUTAGE REPORTING SHOULD NOT BE EXTENDED TO INCLUDE EVENTS RELATED TO CYBERSECURITY.

Commenters uniformly oppose expanding outage reporting to include events that involve hacking, rerouting of packets, and other attacks on networks but do not cause network outages.³⁰ They also note that cybersecurity issues are being continually studied and addressed by CSRIC and other cooperative industry efforts. The *Further Notice* fails to explain why the Commission should depart from those efforts and impose more regulatory mandates, or how a prescriptive rule could encompass all of the constantly evolving methods used in cyberattacks on networks.³¹

²⁸ AT&T Comments at 31; T-Mobile Comments at 18; Verizon Comments at 7 (“The Commission should evaluate the impact of this rule change on the reporting of outages affecting rural areas before considering another distinct reporting threshold.”).

²⁹ The revised CMRS reporting rule and other amended Part 4 rules are undergoing review pursuant to the Paperwork Reduction Act, and comments on their information collection requirements are not due until November 7, 2016. Information Collection Being Reviewed by the Federal Communications Commission, 81 Fed. Reg. 62127 (Sept. 8, 2016). Those requirements cannot take effect until the Office of Management and Budget approves them.

³⁰ *E.g.*, CenturyLink Comments at 8-9; Comcast Comments at 32-33; CTIA Comments at 11-12; NCTA Comments at 25; T-Mobile Comments at 16-17; USTA Comments at 17-18.

³¹ CTIA notes that a FCC-imposed rule also is questionable, given that the U.S. Department of Homeland Security is the sector-specific agency for cyber incidents affecting the communications sector. See Presidential Policy Directive-21 (PPD-21), “Critical Infrastructure Security and Resilience,” Feb. 12, 2013, *available at* <https://www.whitehouse.gov/the-press-office/2013/02/12/presidential-policy-directive-critical-infrastructure-security-and-resil>.

Developing nimble and flexible best practices or other approaches is far superior to a mandatory reporting scheme.

Moreover, the record supplies no rational basis for the Commission to consider adding new reporting mandates to cover cybersecurity. No commenter explained why the Commission should expand its Part 4 rules to encompass cybersecurity issues. Rather, the Commission should continue its work collaborating with industry to combat cyber threats through the development of best practices and other actions.

VII. SAFEGUARDS ARE ESSENTIAL FOR ANY ACCESS TO NORS REPORTS.

Although the Commission did not propose specific amendments to its current rules that treat NORS reports as confidential, it indicated that it may alter those rules to permit access to state and other federal agencies. It did not, however, offer a rationale for why it should consider doing so. Many commenters oppose granting such access or support doing so only if safeguards are put in place to protect the confidentiality of the reports.³²

While several commenters advocate requiring carriers to file outage information directly with state agencies,³³ they fail to address the reasons why the Commission has treated this information as confidential. They offer no basis for the Commission to alter that position. CTIA opposes any such mandate.

³² *E.g.*, ATIS Comments at 20; CTIA Comments at 18-19; Comments of Comtech Telecommunications Corp. (filed Aug. 26, 2016) at 5 (opposing state access to NORS reports; NORS “is not designated for non-FCC use and is not currently organized so that state specific data could be easily available.”); NCTA Comments at 25; USTA Comments at 15-16.

³³ New York PSC Comments at 8; Comments of the Virginia State Corporation Commission (filed Aug. 26, 2016) at 4.

If the Commission considers allowing broader access to NORS reports, it should do so only if meaningful safeguards are put in place to protect their confidentiality and restrict their disclosure.³⁴ The safeguards CTIA and other parties propose would not be burdensome but would help ensure that only agency personnel with specified public safety and national security responsibilities that require obtaining network outage information can view NORS reports. The record supports a set of safeguards that would allow a state agency's access conditioned on the following requirements: the agency must (1) identify the specific, enforceable confidentiality protection laws or regulations that are in effect; (2) restrict disclosure to a defined and limited set of direct employees who attest that they have a need to review the data and have the necessary qualifications to do so; (3) prevent further dissemination either inside or outside the agency, (4) have an audit log to record who accesses which reports, (5) inform affected NORS filers which employees have been granted access; and (6) inform the Commission and affected NORS filers immediately of any unauthorized disclosure.³⁵ In addition, these safeguards would obviate the need for any additional state-specific outage requirements that state commissions may seek to impose on providers.

³⁴ Two state commissions addressing this issue agree. Comments of the California Public Utilities Commission (filed Aug. 26, 2014) at 14 (CPUC “agrees with the FNPRM’s presumptive confidential treatment of broadband reports”); Washington UTC Comments at 2 (states should be given access to outage reports “in a way that ensures the information’s confidentiality.”).

³⁵ E.g., ATIS Comments at 20-21; AT&T Comments at 22-24; CTIA Comments at 20-21; NCTA Comments at 25.

VIII. CONCLUSION

The record on the Commission's proposals to expand its outage reporting rules supplies no policy reasons or any lawful basis for doing so. The Commission should thus not adopt these proposals.

Respectfully submitted,

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